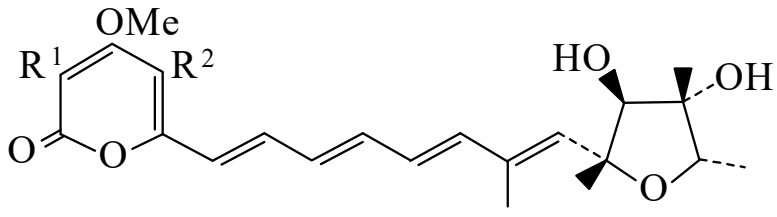
>>**Entry Name: Citreoviridin**
Synonym(s): Citreoviridin A



$R^1 = H, R^2 = CH_3$

CAS Registry Number: 25425-12-1

Molecular Formula: $C_{23}H_{30}O_6$
Molecular Weight: 402.486
Accurate Mass: 402.20424
Percentage Composition: C 68.64%; H 7.51%; O 23.85%
Biological Source: Metab. of *Penicillium citreo-viride, Penicillium toxicarium, Penicillium ochrosalmoneum* and *Aspergillus terreus*
Use/Importance: Neurotoxic mycotoxin. Potent inhibitor of mitochondrial ATPase activity
Physical Description: Deep-yellow cryst. (MeOH)
Melting Point: Mp 107-111°
Solubility: BERDY SOL: Sol. MeOH, $CHCl_3$; poorly sol. H_2O, hexane
UV: [neutral] λ_{max} 204 (ε 17000); 235 (ε 10200); 286 (ε 24600); 294 (ε 27100); 388 (ε 48000); 398 (sh) (ε 46000) (EtOH) (Derep) [neutral] λ_{max} 205 (ε 14100); 238 (ε 10000); 294 (ε 24500); 390 (ε 45000) (MeOH) (Berdy) [neutral] λ_{max} 234 (ε 10200); 294 (ε 27100); 388 (ε 48000) (EtOH) (Berdy)
Other Data: *A. terreus* also produces Citreoviridins B-F; B, E, and F are of unknown struct.
Hazard & Toxicity: LD_{50} (mus, orl) 29 mg/kg. Exp. reprod. and teratogenic effects ; BERDY HAZD : LD_{50} (mus, ipr) 7.2 mg/kg , LD_{50} (mus, scu) 11 mg/kg , LD_{50} (mus, orl) 29 mg/kg

Sigma: C2784

>>**Derivative:** Ac

Physical Description: Cryst.
Melting Point: Mp 99-101°

References:

Saito, M. *et al.*, *Microb. Toxins*, 1971, **6**, 299, *(rev)*
Nagel, D.W. *et al.*, *Phytochemistry*, 1972, **11**, 3215, *(biosynth)*
Sakabe, N. *et al.*, *Tetrahedron*, 1977, **33**, 3077, *(struct)*
Linnett, P.E. *et al.*, *Biochem. J.*, 1978, **170**, 503, *(props)*
Franck, B. *et al.*, *Angew. Chem., Int. Ed.*, 1980, **19**, 461, *(isol)*
Steyn, P.S. *et al.*, *J.C.S. Perkin 1*, 1982, 2175, *(biosynth)*
Steyn, P.S. *et al.*, *Chem. Comm.*, 1985, 1531, *(biosynth)*
Nishiyama, S. *et al.*, *Tet. Lett.*, 1985, **26**, 231, *(synth, abs config)*
Williams, D.R. *et al.*, *J.O.C.*, 1987, **52**, 5067, *(synth)*
Suh, H. *et al.*, *J.A.C.S.*, 1988, **110**, 470, *(synth)*
Hatakeyama, S. *et al.*, *J.A.C.S.*, 1988, **110**, 5201, *(synth)*
Betina, V., *Mycotoxins: Chemical, Biological and Environmental Aspects*, Elsevier, 1989, *(rev)*
Bowden, M.C. *et al.*, *J.C.S. Perkin 1*, 1991, 1947, *(synth)*
Whang, K. *et al.*, *J.O.C.*, 1991, **56**, 7174, *(synth)*
Cole, R.J. *et al.*, *Handbook of Toxic Fungal Metabolites*, Academic Press, New York, 1981, 876
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold*, 1992, CMS500